

REMARKS

Status of the Application

As per the Non-Final Office Action mailed September 24, 2004, Claims 1 to 35 are pending in the reissue application. Claims 1 to 35 stand as rejected under 35 U.S.C. §251 as well as under 35 U.S.C. §112.

Rejection under 35 U.S.C. §251

Claims 1 to 35 stand as rejected by the Examiner under 35 U.S.C. §251 as being based upon new matter added to the patent for which reissue is sought. The Examiner state that “[t]he added material which is not supported by the prior patent is as follows: There is no support in the originally filed specification for a polybutylene [*sic*] having a number average MW of 112. There is nothing in the specification that would indicate or support $n = 0$ in the formula for polybutylene [*sic*]. The originally claimed and disclosed lower limit of 50 for the number average MW could just as well be a typographical error for 500 (and requisite average value of n to achieve the MW of 500).”

Applicants believe that the originally filed specification does provide adequate support for a polybutene having a number average molecular weight of 112. The original specification (that of U.S. Patent 6,558,513) provides that the method of the present invention comprises applying a non-aqueous, non-curing hydrocarbon polymer composition to press rolls or other paper processing equipment, where the hydrocarbon polymers have Formula I (see, *inter alia*, column 3, lines 38-48; column 4, lines 35-49). The preferred hydrocarbons cited in the specification were polybutenes of Formula II or III, where n was such that the number average molecular weight ranged from 50 to 3000, preferably from 100 to 1000 (see, *inter alia*, column 3, lines 44-61; column 4 lines 35-64; and Claims 1-3).

As stated in the documents filed for this reissue application, when $n=0$ in Formula I, the resulting number average molecular weight was calculated to be 112, which is within the number average molecular weight range of from 50 to 3000 provided in the originally filed specification. Thus, the claims of this reissue application, which are narrower with respect to the number average molecular

weight, are certainly within the scope of the originally allowed claims and not new matter. While the phrase “n=0” is not explicitly provided in the original specification, it is readily determinable by one skilled in the art because it is defined in terms of the number average molecular weight range provided by the specification.

Furthermore, as set forth above, the Examiner proffers that the number average molecular weight range of 50 to 3000 may be a typographical error on the part of the Applicants. However, Applicants direct the Examiner to the preferred range for the number average molecular weight in the originally filed specification such as 100 to 1000 (see, *inter alia*, column 4, lines 35-64; column 5, lines 10-27 and lines 33-61 and Claims 3 and 14) as well as those set forth in Table 1 (PB-1 (370 MW) and PB-2 (455 MW)), all of which clearly indicate that the range of the number average molecular weight provided for the present invention in this reissue application should not have a lower limit of 500.

As a result, since the number average molecular weight set forth in the specification should not have a lower limit of 500 and because the amended claims in the reissue application do not contain new matter, Applicants respectfully request that the Examiner’s rejection under 35 U.S.C. §251 be withdrawn.

Rejection under 35 U.S.C. §112, First Paragraph

Claims 1 to 35 stand as rejected by the Examiner under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner states that “[t]he claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the originally filed specification for a polybutylene [*sic*] having a number average MW of 112. There is nothing in the specification that would indicate or support $n = 0$ in the formula for the polybutylene [*sic*]. The originally claimed and disclosed lower limit of 50 for the number average MW could just as well be a typographical error for 500 (and requisite average value of n to achieve the MW of 500).”

Applicants believe that the originally filed specification does provide adequate support for a polybutene having a number average molecular weight of 112, thereby

satisfying the requirements for written description. As noted above, Formulas I, II and III set forth in the original specification clearly provide one skilled in the art with the necessary roadmap to determine the value of “n” where the number average molecular weight ranges from 50 to 3000. Applicants were in possession of the invention at the time of filing, because it is clear that one skilled in the art could readily determine the value of “n” without any undue experimentation, based only on the description provided by the original specification. Applicants’ possession of the invention is easily shown by calculating which values for “n” correspond to the number average molecular weight range provided in the specification, using the provided chemical formulas. The available values for “n” are limited to those values delivering a number average molecular weight in the provided range and “n” is not described in an overly broad fashion having an unlimited number of possibilities.

Thus, the written description requirement has been satisfied and Applicants respectfully request that the Examiner’s rejection under 35 U.S.C. §112, first paragraph, be withdrawn.

SUMMARY

In view of the foregoing amendments and remarks, Applicants believe the stated grounds of rejection have been properly traversed, accommodated, or rendered moot and that a complete response has been made to the Non-Final Office Action mailed September 24, 2004. Applicants believe that the application stands in condition for allowance with withdrawal of all grounds of rejection. A Notice of Allowance is respectfully solicited. If the Examiner has questions regarding the application or the contents of this response, the Examiner is invited to contact the undersigned at the number provided.

Serial No. 10/645,281
DKT 10159 – RE (24020-064)

A fee for a one-month extension of time is due in accordance with this response. Additionally, should a fee be due that is unaccounted for, please charge such fees to Deposit Account No. 501447 (Potter Anderson & Corroon LLP). Furthermore, if any extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefore are hereby authorized to be charged to Deposit Account No. 501447.

Respectfully submitted,



Thomas R. Mancini
Wilmington, DE 19899-0951
Telephone: (302) 984-6127
Facsimile: (302) 658-1192
Attorney For Applicants
Reg. No.: 50,157

Dated: January 24, 2005
666424v1